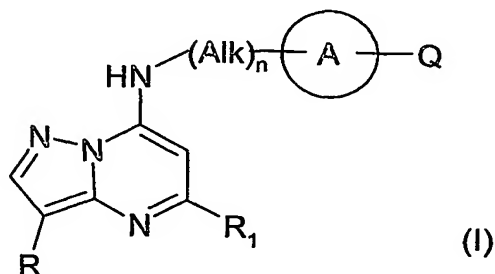


Claims.

1. The use of a compound of formula (I) or a salt, N-oxide, hydrate or solvate thereof, in the preparation of a composition for inhibition of kinase activity:



wherein

Ring A is an optionally substituted carbocyclic or heterocyclic radical,

Alk represents an optionally substituted divalent C₁-C₆ alkylene radical;

n is 0 or 1;

Q represents a radical of formula $-(\text{Alk}^1)_p-(\text{X})_r-(\text{Alk}^2)_s-\text{Z}$ wherein in any compatible combination

Z is hydrogen or an optionally substituted carbocyclic or heterocyclic ring,

Alk¹ and Alk² are optionally substituted divalent C₁-C₆ alkylene radicals which may contain a -O-, -S- or -NR^A- link, wherein R^A is hydrogen or C₁-C₆ alkyl,

X represents -O-, -S-, -(C=O)-, -(C=S)-, -SO₂-, -SO-, -C(=O)O-, -OC(=O)-, -C(=O)NR^A-, -NR^AC(=O)-, -C(=S)NR^A-, -NR^AC(=S)-, -SO₂NR^A-, -NR^ASO₂-, -OC(=O)NR^A-, -NR^AC(=O)O-, or -NR^A- wherein R^A is hydrogen or C₁-C₆ alkyl, and

p, r and s are independently 0 or 1,

R₁ represents a radical $-(\text{Alk}^3)_a-(\text{Y})_b-(\text{Alk}^4)_d-\text{B}$ wherein
a, b and d are independently 0 or 1,

Alk³ and Alk⁴ are optionally substituted divalent C₁-C₃ alkylene radicals,

Y represents a monocyclic divalent carbocyclic or heterocyclic radical having from 5 to 8 ring atoms, -O-, -S-, or -NR^A- wherein R^A is hydrogen or C₁-C₆ alkyl,

B represents hydrogen or halo, or an optionally substituted monocyclic carbocyclic or heterocyclic ring having from 5 to 8 ring atoms, or in the case where Y is -NR^A- and b is 1, then R^A and the radical $-(\text{Alk}^4)_d-\text{B}$ taken together with the nitrogen to which they are attached may form an optionally substituted heterocyclic ring,

R represents hydrogen, halo, C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₆ alkylthio, phenyl, benzyl, cycloalkyl with 3 to 6 ring atoms, or a monocyclic heterocyclic group having 5 or 6 ring atoms.

2. The use as claimed in claim 1 wherein ring A is an optionally substituted monocyclic aryl or heteroaryl radical.
3. The use as claimed in claim 2 wherein ring A is phenyl, naphthyl, 2-, 3- and 4-pyridyl, 5-pyrimidinyl, 2- and 3-thienyl, 2- and 3-furyl, piperazinyl, pyrrolidinyl, or thiazolinyl.
4. The use as claimed in claim 1 wherein ring A is phenyl.
5. The use as claimed in any of the preceding claims wherein ring A is unsubstituted or substituted by methyl, ethyl, methylenedioxy, ethylenedioxy, methoxy, ethoxy, methylthio, ethylthio, hydroxy, hydroxymethyl, hydroxyethyl, mercapto, mercaptomethyl, mercaptoethyl, amino, mono- or di-methylamino,

mono- or di-ethylamino, fluoro, chloro, bromo, cyano, N-morpholino, N-piperidinyl, or N-piperazinyl, the latter being optionally C₁-C₆ alkyl- or benzyl-substituted on the free ring nitrogen, dimethylaminosulfonyl, phenylsulfonyl or phenoxy.

6. The use as claimed in any of claims 1 to 3 wherein Q is hydrogen and the ring A is 4-(dimethylaminosulfonyl)-phenyl, 4-(phenylsulfonyl)-phenyl, 4-(phenoxy)-phenyl, 3-chloro-4-(dimethylaminosulfonyl)-phenyl, 3-chloro-4-(phenylsulfonyl)-phenyl, 3-chloro-4-(phenoxy)-phenyl, 3-methoxy-4-(dimethylaminosulfonyl)-phenyl, 3-methoxy-4-(phenylsulfonyl)-phenyl, or 3-methoxy-4-(phenoxy)-phenyl.

7. The use as claimed in any of claims 1 to 5 wherein n is 1 and Alk is –CH₂–, –CH₂CH₂–, –CH₂CH(CH₃)–, –CH₂CH₂CH₂–, –CH=CH–, –CH₂CH=CH–, –CH₂CH=CHCH₂–, –CH=CHCH=CH–, –C≡C–, –CH₂C≡C–, or –CH₂C≡CCH₂–.

8. The use as claimed in any of claims 1 to 5 wherein n is 1 and Alk is –CH₂–.

9. The use as claimed in any of claims 1 to 5 wherein n is 0.

10. The use as claimed in any of claims 1 to 5 wherein each of p, r and s is 0, and Z is hydrogen.

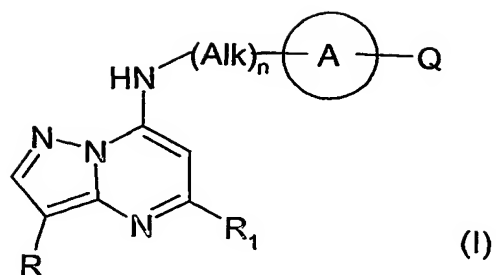
11. The use as claimed in any of claims 1 to 5 wherein p, r and s are each 0, and Z is an optionally substituted monocyclic carbocyclic or heterocyclic ring.

12. The use as claimed in claim 11 wherein Z is an optionally substituted phenyl, cyclopentyl, cyclohexyl, pyridyl, morpholino, piperidinyl, or piperazyl ring.

13. The use as claimed in any of claims 1 to 5 wherein one or more of p, r and s is 1, and Z is hydrogen or an optionally substituted monocyclic carbocyclic or heterocyclic ring.
14. The use as claimed in claim 13 wherein p and/or s are each 1 and r is 0
15. The use as claimed in claim 13 wherein each of p, r, and s is 1.
16. The use as claimed in claim 13 wherein p and s are each 0 and r is 1.
17. The use as claimed in claim 16 wherein X is $-\text{SO}_2-$, $-\text{O}-$, a sulfonamide radical $-\text{NR}^{\text{A}}\text{SO}_2-$ or a carboxamide radical $-\text{NR}^{\text{A}}\text{C}(=\text{O})-$ with the N atom linked to the ring A.
18. The use as claimed in claim 13 wherein p is 0, r is 1, s is 1 or 0, and X is a sulfonamide radical $-\text{NR}^{\text{A}}\text{SO}_2-$ or a carboxamide radical $-\text{NR}^{\text{A}}\text{C}(=\text{O})-$ with the N atom linked to the ring A.
19. The use as claimed in claim 17 or claim 18 wherein R^{A} is hydrogen or methyl.
20. The use as claimed in claim 18 or claim 19 wherein s is 1 and Z is hydrogen.
21. The use as claimed in claim 18 or claim 19 wherein s is 0 and Z is an optionally substituted monocyclic carbocyclic or heterocyclic ring.
22. The use as claimed in claim 21 wherein Z is optionally substituted phenyl.
23. The use as claimed in any of the preceding claims wherein in the radical R_1 a, b and d are all 0.

24. The use as claimed in any of claims 1 to 22 wherein in the radical R_1 a and d are each 0 and b is 1.
25. The use as claimed in any of claims 1 to 22 wherein in the radical R_1 b is 0 and at least one of a and d is 1.
26. The use as claimed in any of claims 23 to 25 wherein in the radical R_1 , B is an optionally substituted monocyclic carbocyclic or heterocyclic ring.
27. The use as claimed in claim 26 wherein B is an optionally substituted cyclopentyl, cyclohexyl, phenyl, 2-,3-, or 4-pyridyl, 2-, or 3-thienyl, 2-, or 3-furanyl, pyrrolyl, pyranlyl, or piperidinyl ring.
28. The use as claimed in claim 27 wherein optional substituents are selected from methyl, ethyl, methoxy, ethoxy, methylenedioxy, ethylenedioxy, methylthio, ethylthio, hydroxy, hydroxymethyl, hydroxyethyl, mercapto, mercaptomethyl, mercaptoethyl, amino, mono- and di-methylamino, mono- and di-ethylamino, fluoro, chloro, bromo, cyano, N-morpholino, N-piperidinyl, N-piperazinyl.
29. The use as claimed in any of claims 1 to 22 wherein R_1 is optionally substituted cyclohexyloxy; cyclohexylamino; cyclohexylmethyl, or piperidin-1-ylmethyl.
30. The use as claimed in any of claims 1 to 22 wherein R_1 is 4-aminocyclohexyloxy; 4-aminocyclohexylamino; 4-hydroxycyclohexylamino, 4-aminocyclohexylmethyl, or 4-aminopiperidin-1-ylmethyl.
31. The use as claimed in any of the preceding claims wherein R is hydrogen, chloro, bromo methyl, ethyl, n-propyl, iso-propyl, n-, sec- or tert-butyl, methoxy, methylthio, ethoxy, ethylthio, or a phenyl, benzyl, cyclopropyl, cyclopentyl, cyclohexyl, 2-, 3-, or 4- pyridyl, phenyl, pyridyl, morpholino, piperidinyl, or piperazyl ring.

32. The use as claimed in any of claims 1 to 30 wherein R is chloro, bromo, cyclopentyl, cyclopropyl or isopropyl.
33. The use as claimed in claim 1 wherein in the compound of formula (I) n is 0, ring A is optionally substituted phenyl, Q is dimethylaminosulfonyl, phenylsulfonyl or phenoxy; R¹ is 4-aminocyclohexyloxy, 4-aminocyclohexylamino, 4-hydroxycyclohexylamino, 4-aminocyclohexylmethyl, or 4-aminopiperidin-1-ylmethyl, and R is chloro, bromo, cyclopentyl, cyclopropyl or isopropyl.
34. A method of treatment of diseases or conditions mediated by excessive or inappropriate kinase activity in mammals, particularly humans, which method comprises administering to the mammal an amount of a compound of formula (I) as defined in any of the preceding claims, or a salt, hydrate or solvate thereof, effective to inhibit said kinase activity.
35. A compound of formula (I) as defined in any of claims 1 to 33, or a salt hydrate or solvate thereof, for use in human or veterinary medicine, particularly in the treatment of diseases or conditions mediated by excessive or inappropriate kinase activity.
- 36.. The use as claimed in any of claims 1 to 33, a method as claimed in claim 34, or a compound for use as claimed in claim 35, wherein the kinase activity is CDK2 and/or PDK1 and/or CHK1 activity.
37. The use as claimed in any of claims 1 to 33, a method of treatment as claimed in claim 34, or a compound for use as claimed in claim 35 wherein the kinase activity is associated with cancer, psoriasis or restenosis.
38. A compound of formula (I) as defined in any of claims 1 to 32, or a salt, N-oxide, hydrate or solvate thereof.
39. A compound of formula (I), or a salt, N-oxide, hydrate or solvate thereof,



wherein n is 0, ring A is optionally substituted phenyl, Q is dimethylaminosulfonyl, phenylsulfonyl or phenoxy, R^1 is 4-aminocyclohexyloxy; 4-aminocyclohexylamino; 4-hydroxycyclohexylamino; 4-aminocyclohexylmethyl, or 4-aminopiperidin-1-ylmethyl, and R is chloro, bromo, cyclopentyl, cyclopropyl or isopropyl.

40 A pharmaceutical composition as claimed in claim 38 or claim 39 together with a pharmaceutically acceptable carrier.